

Content

Editorial foreword	5
Content	7
General issue – decay diagnosis	
Fitzner B. and Heinrichs K.: Damage diagnosis at stone monuments – weathering forms, damage categories and damage indices	11
Non-Destructive Testing	
Nicholson D. T.: Quantification and description of rock breakdown for experimental weathering studies	59
Russell M. I., Basheer P. A. M., Harmon N. And Curran J. M.: Permeation properties of building stone: The Autoclam Permeability System	75
Young M. E.: Using conductivity for assessing chemical residues in stone	85
Experimental weathering and field exposure studies	
Bidner T., Mirwald P. W., Recheis A. and Brüggerhoff S.: Stone as sensor material for weathering	97
Turkington A. V., Smith B. J. and Basheer P. A. M.: Sub-surface temperature and moisture changes in sandstone	113
Slížková Z.: Exposure trials of natural sensor materials for a use in future environmental monitoring of St. Vitus Cathedral in Prague (Czech Republic)	127
Příkryl R. and Dudková I.: Experience with long term experimental exposure of building stones: a 70 years study in the Czech Republic	135
Limestone and marble weathering studies	
Robinson D. A. and Moses Ch.: Rapid asymmetric weathering of a limestone obelisk in a coastal environment: Telscombe Cliffs, Brighton, UK	147
Jornet A., Teruzzi t. and Rück P.: Bowing of Carrara marble slabs: comparison between natural and artificial weathering	161
Pera E. and Burlini L.: Elastic properties of selected Italian marbles	171
Recheis A. , Bidner T. and Mirwald P. W.: The ultrasonic differences of the two marble portals of Schloss Tirol/South Tyrol – a case of weathering or of material?	183
Markopoulos T. and Galetakis M.: Investigation of stones used for the restoration/reconstruction of the church of Saint Peter Dominican, Heraklion-Crete	189
Török Á: The influence of wall orientation and lithology on weathering of ooidal limestone building blocks	197
Příkryl R., Svobodová J., Siegl P., Chvátal M., Novotná M., Sanchez R. A., Mészlová M., Myšková K., Faltus J. and Korecký J.: Weathering of limestone cladding above the waterproofing layer: salt action due to previous restoration of the Colonnade (Valtice-Lednice area, Czech Republic)	209
Rocks and their weathering within Bohemian Cretaceous Basin	
Engel Z. and Kalvoda J.: Morphostructural development of the Bohemian Cretaceous Basin	225

Vařilová Z.: A review of selected sandstone weathering forms in the Bohemian Switzerland National Park, Czech Republic	233
Zvelebil J., Cílek V. and Štemberk J.: Partial results of monitoring of stability deterioration on Pravčice Rock Arch, NW Bohemia	243
Soukupová J., Hradil D. and Příklad R.: Chemical weathering of sandstone matrix – controls and case studies	263

Case studies and conservation experience

Sidraba I., Krage L., Igaune S. and Vitina I.: Corrosion and restoration of travertine and granite in Monument to Freedom (Riga, Latvia)	275
Kotlík P. and Heidingsfeld V.: Monitoring of stone sculptures and reliefs in Bethlehem near Kuks (Eastern Bohemia)	285

Atmospheric studies

Pope G. A., Stavash J. M. and Walker J. C.: Correlation of acid wet deposition with trends in stone deterioration at the local scale	297
Dalton J. S., Janes P.A., Jones N.G., Hallam K. R., Nicholson J. A. and Allen G. C.: Photocatalytic oxidation of NO _x gases using TiO ₂ : A spectroscopic approach	317

Miscellaneous

Andrew Ch.: Perception and aesthetics of weathered stone façades	331
Shadmon A.: Stone – what is in name? Interdisciplinary implications – an overview	341
Welton R. G., Cuthbert S. J. and McLean R. O.: The psychological deterioration of natural stone masonry	351